SWCD
51 Escort Ln.
Iowa City, IA 52240

Clear Creek

Deer Creek & North Branch Projects

September 2008

Watershed Coordinator: James Martin 337-2322 or 668-2359

Fast Facts:

- According to the Iowa 2008 Flood Damage Survey; 55% of grassed waterways, 83% of Terraces, and 90% of dry-ponds operated properly. **Conservation pays!**

Inside this issue:

Emergency Conservation Program Deadline Approaching

Iowa and Johnson Counties are eligible for ECP funding, **signup ends September 15, 2008.**

The Farm Service Agency's (FSA) Emergency Conservation Program (ECP) provides emergency funding and technical assistance for farmers to rehabilitate farmland damaged by natural disasters.

75% Cost-share is available in Iowa Co. to repair structures and waterways back to pre-storm conditions. In Johnson Co. funds can only be used for debris removal.

Two common questions producers have are; Do I have to repair to NRCS specifications? And what is the difference between the NRCS cost-share and the ECP from FSA.

The answers are no, you don't have to build to the NRCS specs. and as a disaster aid program in the Farm Bill, ECP is mainly for repairs.

If you have a situation where a full re-work of a grassed waterway and tile is needed or new terraces designed, those are situations that the NRCS programs are geared to.

If you are not sure of where to go, feel free to give us a call and arrange a site visit.

Sheet erosion turning into gully erosion in the absence of a grassed waterway or terrace system. USDA-NRCS photo.

A hoop building is one of many options available for controlling manure and runoff from open feedlots.

State Loans and Cost Share - A Winning Combination for Smaller Open Feedlots

"For the first time, we'll be able to offer a low interest loan to producers who want to replace all or part of their open feedlot with a deep bedded confinement," said Patti Cale-Finnegan, the DNR's loan coordinator.

Loans are available for the buildings because they confine animals and manure, preventing runoff or discharge of the manure. Projects that will benefit Iowa's water quality and environment are eligible.

Funding can be used for deep bedded buildings that:

1. Replace or cover an existing feedlot, or
2. Expand a facility as an addition to an existing open feedlot, provided the open feedlot remains in compliance with all environmental rules.

"Currently $75-$150 per animal unit is available as cost share assistance through the federal EQIP cost share program.

Producers may apply for loans through many local lenders. For more information contact James Martin at the Johnson or Iowa Co. NRCS.

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Clear Creek News

Deer Creek & North Branch Projects

Recent / Upcoming Events, Field Days...

Late Spring Nitrate Testing Project...

One of the goals of the watershed project involves offering nutrient management funding. In early June we partnered with Dr. Jim Fawcett and Dr. Greg Brenneman of ISU Ext., taking the late spring soil nitrate test for 14 producers. By providing access to more detailed field-level nutrient data producers are more informed about their nutrient application and better water quality for Clear Creek.

Fall Stalk Testing Project…

As a follow up to the spring test, we will go back to the same locations and test the corn stalks to see if they fell short of nitrogen or had excess. ISU Extension will again partner for the test. In addition a new partnership with the Iowa Soybean Association has offered us the opportunity to receive high resolution air photos of the fields in our program. This will provide a greater level of detail to access nitrogen levels.

September Nutrient Field Day...

Learn how to take the fall stalk test yourself and how to fit it in to your existing nutrient program. We will meet on a farm (to be determined) on **Sept. 22.** Jim and Greg from Extension will demonstrate how to take the stalk test, along with calibrating manure spreaders.

December Nutrient Workshop…

Its been said that drawing conclusions from one years worth of data can be dangerous! We'll come around full circle and discuss the results of the Spring Soil Nitrate Testing and Fall Stalk Nitrate testing that was conducted on 18 fields in the watershed this past year. Taking into account the extreme weather patterns and other variables Drs. Fawcett and Brenneman from ISU-Ext. and a rep from the Iowa Soybean Assoc. will answer questions and discuss the data set that represents various crop rotations nitrogen application times, rates, manure, and tillage. Date to be determined.

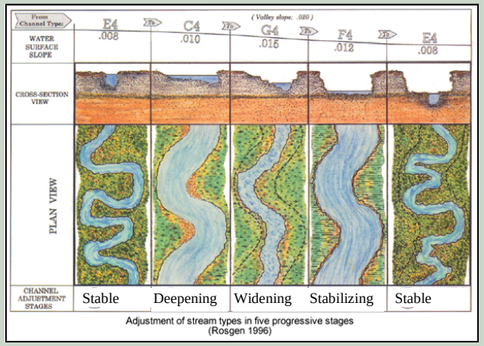
February 2009 Septic Workshop…

Learn how the July 2008 law requiring inspection prior to the sale of a house might effect you in addition to techniques to maintain your existing system.

The Clear Creek. Watershed Project is supported by the Division of Soil Conservation, Iowa Department of Agriculture and Land Stewardship, and by the Iowa Department of Natural Resources through a grant from the U.S. Environmental Protection Agency.

What Stage of Channel Evolution is the Section of Your Part of the Creek In?

Streams are Machines!



Adjustment of stream types in five progressive stages (Rosgen 1996)

Figure 1

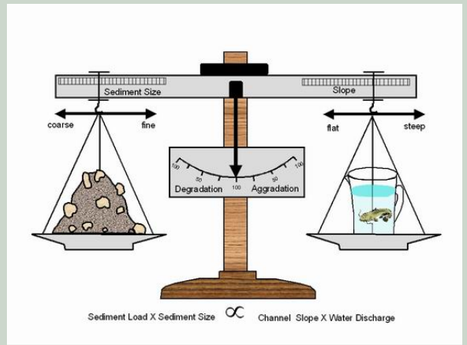


Figure 2

This year there has been increasing concern over streambank erosion. Most often in situations where an adjacent road bridge is impacted.

When evaluating a creek for stabilization options its important to know what stage in the channel evolution model **(Fig.1)** your segment is in. However it is just as important to understand the stage the creek is in both upstream and downstream of your property.

For example if we stabilize one stream segment with riprap and the segment on the downstream property is still in the deepening phase, the stabilization would be short lived as the downcutting advances upstream, undermining your project.

Streams Seek Balance (fig.2)

Making a change in one segment will affect both upstream and downstream. It's a creek fundamental, the balance between the energy in the water and the sediment in the channel. For example, when a creek is straightened it becomes faster and steeper which means more power to chew a deeper channel before returning to equilibrium. It would also stand to reason that if you reduce erosion on the hills in the watershed then more sediment will be removed from within the streambed itself as the water in the channel always seeks to maximize its load potential.

Clear as mud?

Its hard to fight nature, but the NRCS has design specifications that can repair and mimic a stable stream corridor. A combination of filter strips, re-shaping the banks and installing a series of riffle pools (like rock crossings) at calculated intervals can heal a deepening or widening segment.

Cost-Share is available

If you have concerns, feel free to contact us for a site visit and determination of eligibility for 75% cost-share.

A sign of a previous deepening phase, too much energy and too far to reach the flood plain (crop ground). Bank erosion allows the creek to create a new & lower flood plain. Over time erosion will end as the creek is allowed to dissipate energy during heavy rains much quicker.
USDA-NRCS Photo

One of the many times Clear Creek came out of its banks this year. Photo by Lloyd Trimpe

Expiring CRP ? - Conservation Planning Options from Cows to ~~Plows~~ No-Till

In the past year, we have seen many acres of CRP returning to row crop production. **For producers interested in maintaining the environmental benefits of grass, the CRP to Grazing program is a great new financial incentive.**

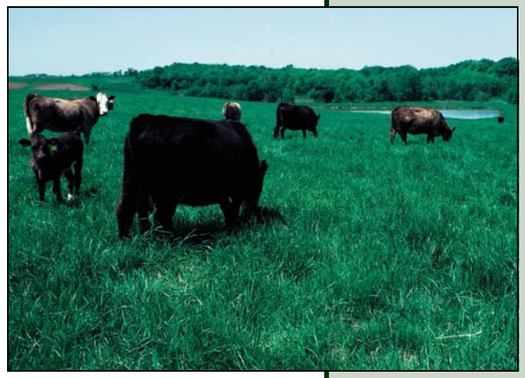
Sept 30 is the signup deadline for CRP expiring in 2008.

It will continue in 2009 and intended to offer producers an opportunity to install practices such as **fence, watering systems, ponds, and interseeding** before the CRP contract expires. In addition to up to 75% cost-share for these practices, producers can get $25/acre/year for 3 years on a 2-4 paddock system or $40/acre/year for 3 years on a system with 5 or more paddocks.

For producers planning to convert CRP to row crops, your first step is to document your intensions with NRCS.

This involves a conservation plan that maintains a soil loss of no greater than 5 tons/acre/yr. To achieve the magic 5 ton limit, you generally either go 100% no-till in the crop rotation or leave some existing sod as contour grass buffer strips. The **contour grass strips can be re-enrolled into CRP** at a higher rate (approx $150/ac/yr.). To enroll the grass strips, sign-up at FSA no later than Sept of the year your contract expires.

Contact James Martin for details.



The CRP to grazing program can provide cost share for watering systems and fence.
USDA-NRCS photo

Tips for No-tilling into CRP Ground

by Darrell Bruggink, CTIC. Edited by James Martin

The first impulse of many growers may be to plow under Conservation Reserve Program (CRP) ground when converting it back into cropland. While there is a dense network of fibrous material beneath the soil surface, what really gets the attention of producers is the "low-flying jungle" in plain view, says researcher John Baker.

The main consideration when no-tilling crops directly into CRP are coping with the weeds, legumes and possible pests without either blocking the machine or destroying all the good biological things that have happened to the soil while in CRP the past decade.

"The worst possible thing that can be done to CRP is to till it," he says.

Instead...

1. Cut and harvest grass
2. Kill with herbicide
3. Avoid Cereals in yr. 1
4. Decomposing biomass will lock up large quantities of soil nitrogen after spraying. Add nitrogen when planting.
5. Avoid broadcasting fertilizer.
6. Select openers carefully. Most disc-type openers are likely to hairpin in heavy residue. Horizontal slots such as found on cross slot openers work well.
7. The weed seed bank is vast. Don't wait too long to plant after spraying.
8. Plant later, choosing a later-maturing hybrid or variety. Dead sod may prevent soil from drying or warming.

Corn planted into sod residue.
USDA-NRCS Photo